

**What is claimed is:**

1. A method of load balancing in an upstream proxy, the method comprising:

receiving information from a plurality of downstream proxies;

5 maintaining a list of downstream proxies; and

assigning a weight to each of the downstream proxies in the list, the weight based upon information received from the downstream proxies.

10 2. The method of claim 1 further comprising receiving a request and using the weights to assign a proxy.

3. The method of claim 1 wherein the information is indicative of the traffic load on the downstream proxy.

15 4. The method of claim 1 wherein the information is indicative of the tracking delay in the responses of the downstream proxy.

5. The method of claim 3 wherein the load is determined by querying the processes of the downstream proxy.

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6. A control node for load balancing, the control node comprising:

means for receiving information from a plurality of downstream proxies;

means for maintaining a list of all downstream proxies; and

means for assigning a weight to each of the downstream proxies in the list, the weight based upon information received from the downstream proxies.

7. The system of claim 6 further comprising:

5 means for receiving a request; and  
means for using the weights to assign a proxy.

8. A system for providing load balancing, the system comprising:

a plurality of proxies; and  
10 a control node coupled to the plurality of proxies, the control node receiving information from the plurality of proxies, maintaining a list of all proxies, and assigning a weight to each of the proxies in the list, the weight based upon information received from the proxies.

15 9. The system of claim 9 wherein the control node receives a request and uses the weights to assign a proxy to the request.

10. A method for assigning weights to a group of proxies, the method comprising the steps of:

20 sending a message to each of the proxies;  
determining a response time for each of the messages sent to each of the proxies;

assigning a weight to each of the proxies based upon the response time of the message sent to the proxies;

receiving a message; and

assigning a proxy based upon the weight.

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11. A method for assigning weights to a group of proxies, the method comprising the steps of:

sending a message to each of the proxies requesting the proxy to send information indicative of the load of the proxy;

10 receiving information indicating the load of each of the proxies;

assigning a weight to each of the proxies based upon the response time of the message sent to the proxies;

receiving a message; and

assigning a proxy to the message based upon the weights of the proxies.

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12. The method of claim 11 wherein the message sent to the proxies is an INVITE message.

13. A system for load balancing, the system comprising:

20 a plurality of proxies;

a control node coupled to the plurality of proxies, the control node receiving messages from users on a network, the control node including a table of weights, each

of the weights associated with one of the plurality of proxies, the weights determined by information received by the control node from the proxies; and

a location server coupled to the control node, the location server directing the messages received by the control node to the proxies.

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14. The system of claim 13 wherein the proxies implement the SIP protocol.

15. A system of claim 13 wherein the information received by the control node from the proxies indicates a time delay.

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16. The system of claim 13 wherein the information received by the control node indicates the loading of the proxies.

17. The system of claim 13 wherein the database includes a plurality of records.

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18. A computer program for load balancing, comprising:

first code for receiving information from a plurality of downstream proxies;

second code for maintaining a list of downstream proxies; and

third code for assigning a weight to each of the downstream proxies in the list, the weight based upon information received from the downstream proxies.

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19. A computer readable medium having stored therein instructions for causing a processing unit to execute the following method:

receiving information from a plurality of downstream proxies;

maintaining a list of downstream proxies; and

5 assigning a weight to each of the downstream proxies in the list, the weight based upon information received from the downstream proxies.

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